

January 10, 2007

REMARKS

Support for the Amendments to the Instant Claims

Instant claim 7 has been amended to insure proper claim dependency and consistency in antecedent basis.

Upon entry of the present amendment, claims 1-8 will stand pending in the instant application. No new matter has been added by the present amendment.

Responses to Claim Objections

Instant claims 7 and 8 have been objected to under 37 CFR 1.75(c) as being in improper dependent form. The Applicants have amended instant claim 7 so that it only refers back to one claim, thereby mooting this objection. The amendment in no way changes the scope of instant claims 7 and 8.

Responses to Claim Rejections

Instant claims 1-8 stand rejected under 35 USC 103(a) as being unpatentable over Cruz, US Patent Publication 2002/0193521 (Cruz), in view of Beall et al., U.S. Patent No. 5,552,469 (Beall et al.), both of record. The Applicants respectfully traverse this rejection.

As the rejection admits, Cruz fails to disclose clay nanoparticles, as are instantly recited.

As the rejection admits, Beall et al. fails to disclose polymeric nanoparticles (PNPs), as are instantly recited.

The rejection fails to acknowledge that Cruz teaches sufficiency of mechanical properties. See paragraph [0002] of Cruz.

The rejection fails to address the fact that Beall et al. does not disclose any intercalated clay or exfoliated clay composition comprising a crosslinked particle, as is instantly claimed. In fact, Beall et al. leads one away from copolymers like the PNPs instantly claimed that are not water soluble. See, for example, Beall et al. at col. 3, lines 34-43, col. 4, lines 48-

January 10, 2007

55, col. 7, lines 11-44, col. 8, lines 32-46 and claim 1, line 4; contrast Cruz at, for example, paragraph [0015] and Table 5.1 (PNPs are all crosslinked); and, contrast the instant specification at, for example, page 3, line 16 to page 4, line 22. Thus, Beall et al. does not give rise to a reasonable expectation of success in intercalating clay in admixture with polymers other than those that are water-soluble, or any crosslinked polymer for that matter. See, e.g. the monomers of Beall et al. on col. 12.

While there must be some suggestion in the art of the desirability of the combination set forth in the rejection, Cruz teaches sufficiency with respect to mechanical properties and there is no reason to expect that the combination of Cruz and Beall et al. is desirable. Further, there is no reasonable expectation that the combination of Cruz and Beall et al. would work as suggested in the rejection. Further, Beall et al. teaches that use the crosslinked copolymers of Cruz would render Beall et al. inoperative to intercalate clay. For these reasons, the rejections combining Beall et al. and Cruz as set forth in the rejection are improper and should be withdrawn.

January 10, 2007

CONCLUSION

Based on the foregoing, it is submitted that the instant claims are currently in condition for allowance. An early and favorable action on the merits is earnestly solicited. If the Examiner has any questions or concerns, she is urged to contact the undersigned at her earliest convenience.

If any fees are found owing, please charge applicant's deposit account number 18-1850.

Sincerely,



Andrew E. C. Merriam
Attorney for Appellants
Registration No. 47,268

Date: January 11, 2007
ROHM AND HAAS COMPANY
100 Independence Mall West
Philadelphia, PA 19106-2399
Telephone : (215) 592-6758